# CSE

# CLEAN STREAM ENTERPRISE LLC Bert Bond

102 E Brown, Clever Mo. 65631 417-693-3590

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October 26, 2014

Rockaway Beach WWTF MO-0108162 1000 Boys Camp Road

C: Cynthia Sands EPA
Greg Perkins DNR
E. C. West DNR
Mike McCabe Mayor Rockaway Beach

Clean Stream Enterprises LLC took over operations of the Rockaway Beach Regional Wastewater Plant September 1<sup>st</sup> of 2014. The City was very open with us about the problems they had been experiencing at the plant and the issues hindering keeping the plant in compliance. The purpose of this cover letter is to inform you of the measures taken and the measures in the planning stages to keep the plant in compliance and improve operations to insure it remains in compliance.

### **Phosphorous**

We repaired the timers for the blowers in the plant and set them to alternate off and on to begin a nitrification de-nitrification process to gain some natural phosphorous removal. Due to the low dissolved oxygen in the ditch we were only able to remove an estimated 15 percent with this process and the remainder of the phosphorous is removed by injecting alum into the system. Our phosphorous levels were in compliance for the month of September and at this time we see no issues to prevent us from remaining in compliance aside from normal mechanical failure etc that temporarily might hinder a plant of this age.

#### **Ammonia**

The ammonia levels were in compliance for the month of September. The former operator left very good records for us to study in an effort to pin point what causes the rise in ammonia levels occasionally and at this time we can only see a rise after he decanted large amounts of supernatant and the low dissolved oxygen in the ditch. Based on the data we have so far we believe that installing diffusers in the bottom of the ditch will increase the oxygen levels and aid in reducing the ammonia levels as well as phosphorous levels. Discussions on the subject have already begun with engineers and hopefully upgrades can be planned in the coming months.

### **Financial**

While I have seen nothing in the EPA enforcement actions that required reporting of financial status I feel it only fair to the city to include this in my report due to the fact that it has played a major role in their inability to remain in compliance at times. The city after doing a rate study increased their rates from 1.50 per thousand to 2.55 to generate needed cash flow. It had been long debated that the Village of Bull Creeks flow meter was not working properly and they were paying only half what they should be, I did my own flow study and informed the operator of the Village and he in turn had MRW do a flow study on their meter with results close to mine. He adjusted their payments to reflect more accurate amounts of flow and is planning to replace their flow meter. The city had been paying over 4,000.00 dollars a month for alum, by switching suppliers and

buying in bulk amounts the estimated cost per month is now approximately 1,500.00 dollars per month resulting in significant savings. The nite de-nite process at the plant will hopefully reduce electricity cost due to the blowers be off several hours a day. With these added revenues the city can re-build its maintenance and repair reserve fund and begin the smaller repairs and up-grades the plant needs.

# Regional Bio-Solids Program

The city is attending the board meeting and in talks with the bio-solids directors about re-joining the program as soon as we can meet the financial requirements to do so.

# Closing

When the City of Rockaway Beach retained us to supervise and operate their facility they pledged their support of any efforts to come into and remain in compliance and have made every effort to not only help us put our suggested plans in place but those I have passed on from the SWRO of DNR. While it has only been a month I am cautiously optimistic that we can remain heading in the positive directions mentioned in this letter.

Any question or concerns contact me anytime at 417-693-3590

Bert Bond

Clean Stream Ent, LLC

Kee'd 2/5/1502

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# CLEAN STREAM ENTERPRISE LLC Bert Bond

102 E Brown, Clever Mo. 65631 417-693-3590

January 27, 2015

Rockaway Beach WWTF MO-0108162 1000 Boys Camp Road WENF FEB 0 5 2015

C: Cynthia Sans EPA
Greg Perkins DNR
E. C. West DNR
Mike McCabe Mayor Rockaway Beach

# **Phosphorous**

I'm pleased to report we have had no phosphorus violations this quarter. We have had some equipment failures that have hindered our process but pumps and hoses have been replaced to reduce the chances of re-occurrence.

### **Ammonia**

We did have an ammonia violation in October. The ammonia levels fluctuate very randomly in this plant and while it's not the only plant that we operate that has this problem, the Rockaway Plant has no way to control the amount of air we introduce to the ditch. The solution to this problem is covered later in this report.

# **Up Grades**

An informal committee has been regularly consulted as to the best measures to take to up-grade the plant to keep it in compliance and give an operator the control to adjust operations as needed. This committee is comprised of DNR officials, Engineers, representatives of each city, Taney County officials and operators with experience in plants difficult to operate. The objective is to make a plan to be implemented in the coming months as well as a five year plan to make the plant "state of the art". Those plans so far include but are not limited to....

Install larger blowers and install defusssers in the bottom of the ditches to create finer air instead of the course air we have now.

A generator that can run the entire plant in the event of a power failure

A new screen to filter out debris before it gets in the system not in the middle of the process.

A new U.V. system.

The possibility of mixers in the ditches instead of the motive pumps.

New blowers all thru the sludge digestion part of the plant.

Many smaller items that are not immediately needed but will be in time as flow increases. The goal is to have this plan in place by the end of March and begin the engineering process.

#### **Financial**

The city has enough funds in the plants account now to cover the "buy in" to the regional Bio-Solids program as well as re-establish their repair and replacement fund. We have also begun doing smaller repairs each

month to begin gaining ground on having all the equipment functional as it should be.

# Regional Bio-Solids Program

The City is still committed to joining the bio-solids program when it comes on line and will not be land applying any more class B sludge.

### Closing

Over the last quarter we have gone over all the EPA compliance requests and orders we have found in the paperwork at the plant and while most have already been addressed we will correct the remaining few in the month of February.

Any question or concerns contact me anytime at 417-693-3590

Bert Bond

Clean Stream Ent, LLC